

CERTIFICATE OF VERIFICATION OF TRANSLATION

I, Elise Duvekot, a citizen of the United States of America, hereby certify that I am fully familiar with the German and English languages and that I am capable of translating from German into English. To the best of my knowledge and ability, the foregoing pages constitute an accurate and complete translation of the copy before me in the German language of three laboratory notebook pages dated August 22, 2001 (PHS 4149), September 3, 2001 and August 31, 2001 (PHS 4152).

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true.

In witness whereof I sign,

April 7, 2009

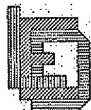
Date

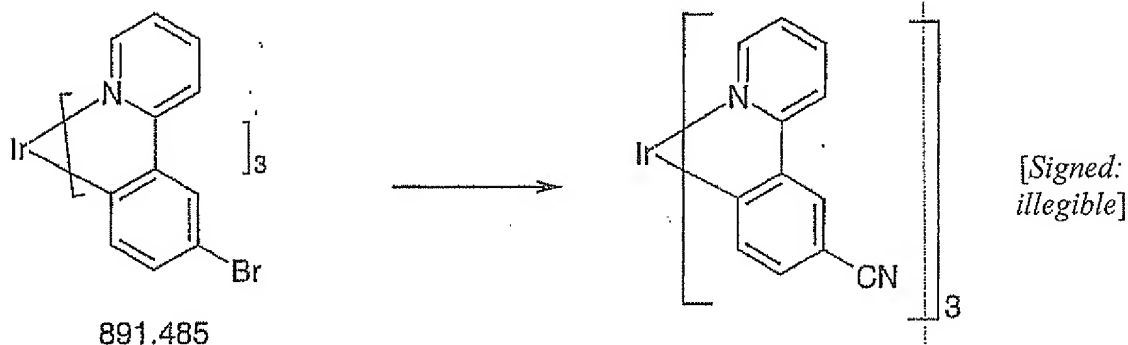
Elise Duvekot

Signature of translator



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Preparation of *fac*-Ir[2-(5-NC-PPy)]₃

Batch: >>> carry out twice

891 mg (1 mmol)	Ir(5'-Br-2-PhPy) ₃ (PHS 4126) +4127	M = 891.485
537 mg = (6 mmol)	CuCN	M = 89.560
15 ml of degasified NMP		

Safety:

Attention!!! For those working with cyanide!

Wear protective gloves. Work only under the exhaust hood!

Waste disposal:

Add 15 g of iron(II) sulfate to all parent liquors that have been collected!

Equipment:

Vial mouth flask experiment:

[Handwritten note]:

Ir (5Br-2PhPy)₃ was weighed in under CuCN and placed under an argon atmosphere, subsequently the degasified NMP was added and put into a stirring block heated up to 145°C [293°F].

NMR after 20 hours → ~ 85% conversion

Read and understood

Signature (witness)

Date

Signature (witness)

Date

Signature(s) of the ([illegible])

[Signed: illegible]

REDACTED

[Signed: illegible]

REDACTED

[Handwritten note]:

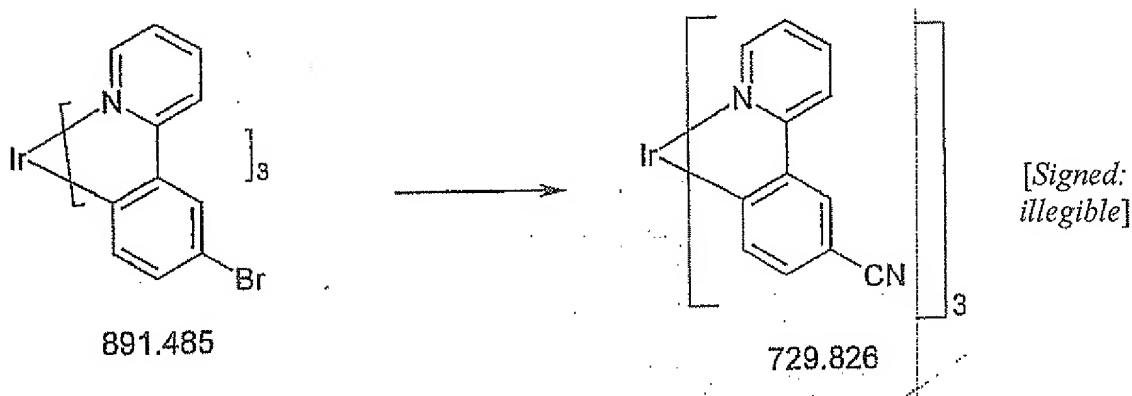
September 3, 2001

PHS 4149 (preparation):

The reaction mixture was placed into a thoroughly stirred solution heated to 50°C [122°F] and consisting of 2.5 g of NaCN in 50 ml of water and 50 ml of ethanol, and subsequently stirred for 2 hours. A solid precipitated and it was then withdrawn, washed three times with 30 ml of the solution consisting of 600 mg of NaCN in 50 ml of water and 50 ml of ethanol, three times with 30 ml of ethanol and water (1:1), and three times with 30 ml of ethanol, and then dried.

*NMR (PHS 1275) in DMSO: 97% to 98%-solution
~ 100% yield*

Read and understood		Signature(s) of the ([illegible])	
Signature (witness)	Date	[Signed: illegible]	REDACTED
Signature (witness)	Date	[Signed: illegible]	REDACTED

Preparation of *fac*-Ir[2-(5-NC-PPy)]₃**Batch: >>> carry out twice**

891 mg (1 mmol)	Ir(5'-Br-2-PhPy) ₃ (PHS 4127)	M = 891.485
537 mg = (6 mmol)	CuCN	M = 89.560
15 ml of degasified NMP		

Safety:**Attention!!! For those working with cyanide!****Wear protective gloves. Work only under the exhaust hood!****Waste disposal:****Add 15 g of iron(II) sulfate to all parent liquors that have been collected!****Equipment:**

Vial mouth flask experiment:

*[Handwritten note]:**Execution analogous to PHS 4149.*

Read and understood

Signature (witness)

Date

Signature (witness)

Date

Signature(s) of the ([illegible])

[Signed: illegible]

REDACTED

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